

Amendment to the Specification:

Please replace the paragraph on page 1, lines 23-25 with the following amended paragraph:

This object is achieved in each case by devices ~~having the features of claims 1, 4 and 7~~ and ~~also by methods having the features of claims 8, 9 and 10.~~ Advantageous the advantageous embodiments ~~are contained in the subclaims disclosed herein.~~

Please replace the paragraph on page 6, lines 16-32 with the following amended paragraph:

To reduce the above-described radiation exposure to a minimum, the data processing device 10 is designed – for example, by equipment with suitable software – to drive the X-ray tube 2 (via drive signal line 9) as a function of the pattern of the measured electrocardiogram in such a way that the picture-taking rate and/or the X-ray exposure rate assume/assumes the necessary maximum value during the movement phases to be recorded (systole), whereas it is correspondingly lower during the other movement phases (diastole). Preferably, the picture-taking rate, the X-ray pulse duration, the X-ray tube current and/or the X-ray tube voltage are/is modified by the data processing device 10 as a function of the measured electrocardiogram. Thus, for example, the picture-taking rate can be a maximum during the contraction and relaxation phase of interest for the myocardium and can be correspondingly reduced during the quiescent phase of the heart. In the extreme case, the picture-taking rate is zero during the quiescent phase of the heart and very high or a maximum during a narrow time window that should be chosen to be large enough to detect variations in the heart rate. In addition or alternatively (i.e. if the picture-taking rate is kept constant during the heart cycle), the X-ray dose applied per picture can also be reduced during the low heart-movement phase. Since more projections from these phases can be used

for the reconstruction of the three-dimensional image, the picture quality does not suffer due to this reduction in dose.